

## MISCELLANEOUS.

*Bot-larvæ in the Terrapin.*

PROF. LEIDY remarked that the habits of a naturalist often led him to observe things in our daily life which usually escape the notice of others. In our food he had frequent occasion to detect parasites which he preferred to reject, but which are unconsciously swallowed by others. While he liked a herring, he never ate one without first removing the conspicuously coiled worms on the surface of the roes; and he had repeatedly extracted from a piece of black bass or a shad a thread-worm which others would not distinguish from a vessel or a nerve. While he did not object to the little parasitic crab of the oyster, he made it a point to remove the equally frequent leech from the clam. It was in a piece of ham he was eating that he first noticed the trichina, which was no doubt one of the causes that led Moses to declare the pig to be unclean; and in the hundred tape-worms he had examined from our fellow-citizens during the past twenty-five years he had ascertained that they had all been derived from rare beef. He continued, in a visit to Charleston, S. C., before the late war, at an evening entertainment, among other viands were nicely browned slices of the drum-fish, *Pogonias chromis*. A friend informed him that some portions were more gelatinous and delicate than others, and helped him to what was supposed to be one of such. On cutting into it he had observed imbedded in the flesh a soft mass which appeared of enigmatic character. The following day he procured from market a drum-fish, on the dissection of which he found imbedded in the tail several egg-shaped masses, about 3 inches long and less than an inch thick, which proved to be a large coiled worm (*Acanthorhynchus reptans*)\*. This it was that gave delicacy to the dainty, and in this instance the parasite seems to enhance the excellence of the food. At another evening entertainment nearer home he partook of some stewed terrapins. Taking into his mouth what appeared to be an egg, it produced such an impression as led to its rejection. Seeming so peculiar he tied it in the corner of his handkerchief for more convenient examination. The specimen, now exhibited, was a membranous bag which contained thirty yellowish-white maggots from 8 to 12 millim. long by 1.5 to 3 millim. broad. They are the larvæ of a bot-fly, and resemble those of the *Gastrophilus* of the horse. Their characters are as follows:—

Body of the larva fusiform, acute anteriorly, obtuse posteriorly, consisting of twelve segments, including the head, which is armed with a pair of strong, black, hooked maxillæ; terminal segment with a pair of trilateral, oval, chitinous disks, each with three spiracles; intermediate segments with numerous minute recurved hooklets, disposed in incompletely separated bands at the fore and back part of the segments.

\* Proc. Acad. Nat. Sci. 1858, p. 111.

The sac containing the larvæ is about three fourths of an inch long and half an inch broad, with a short tubular prolongation open at the extremity. It was uncertain whether the sac formed part of the intestine.

The dish of stewed terrapins was suspected to have been a mixture of the diamond-back, *Emys palustris*, and the red-bellied terrapin, *E. rugosa*. This is not the only instance of the occurrence of bots in turtles, as Prof. A. S. Packard notes the case of larvæ being found in the skin of the neck of the box-turtle, *Cistudo carolina* \*. —*Proc. Acad. Nat. Sci. Philad.* December 13, 1887, p. 393.

*A new Member of the Deep-water Fauna of the Freshwater Basins.*  
By Dr. O. E. IMHOFF.

In my first deep-water investigations in the summer of 1883 and during the continuation of these studies I regularly found in a number of lakes (*e. g.* the Lake of Zurich) a fine, transparent, setigerous worm, of which permanent preparations were made from specimens obtained in the Lungeno lake, where it was particularly plentiful, on the 17th March, 1884. I paid no particular attention to it, because from its abundance and the remarkable facilities offered by the nature of its body for exact investigation I regarded it as certainly already described. Zeppelin's memoir upon *Ctenodrilus monostylos* furnished the inducement to examine this Chætopod more carefully. It is a form which can hardly be ranged in any known genus. It comes near to the genera *Ctenodrilus* and *Parthenope*, of which only marine species are known.

According to Forel, Duplessis, and Grube the following Chætopoda occur in the deep-water fauna of lakes:—*Tubifex rivulorum*, Lamk.; *T. velutinus*, Grube; *Clitellio Lemani*, Grube=*Bythonomus Lemani*, Gr.=*B. profundus*, Dupl.=*Lumbriculus pellucidus*, Dupl.

Noticeable anatomical peculiarities of the new form are:—

There is no ciliary coat on the surface of the body. The setæ exist only in one series of tufts on each side, directed towards the ventral surface. The setæ are thin, straight nearly to both ends, where they are slightly bent in opposite directions, and cleft into a fine fork at the free end. At rather more than one third of the length we find a slight enlargement of the part immersed in the body. I have not hitherto found individuals with generative organs, but, on the contrary, always multiplication by division. The body externally appears to be composed only of four segments, each of which bears two tufts of from four to six setæ. All the setæ are of similar structure. The nervous system is distinctly developed. It consists of a cerebral ganglion situated above the wide, thin-walled, anterior division of the digestive canal; this is of a broad band-like form with a slight constriction in the middle.

\* 'American Naturalist,' 1882, p. 598.